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10/578,037	05/02/2006	David Dillon	102980.58649US2	5332

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EXAMINER	
KUCAB, JAMIE R	
ART UNIT	PAPER NUMBER
3621	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/578,037	DILLON, DAVID	
	Examiner	Art Unit	
	JAMIE KUCAB	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 September 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-31 and 59-81* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-31 and 59-81* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/8/10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Acknowledgements

1. Applicant's response filed September 23, 2010 is acknowledged.

2. Claims 21-31 and 59-81 are pending in the application.

3. Claims 21-31 and 59-81 are examined below.

4. This Office action is given Paper No. 20101107 for reference purposes only.

Information Disclosure Statement

5. The information disclosure statement submitted on October 8, 2010 is in compliance with the provisions of 37 CFR § 1.97. Accordingly, the information disclosure statement is being considered by the Examiner.

Claim Rejections - 35 USC § 112, Second Paragraph

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 21-31 and 59-81 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention.

8. Regarding claim 21, Applicant's recitation "wherein a size of the subset of unique code strings corresponds to the quantity of unique code strings" would have been unclear to a person having ordinary skill in the art at the time of the invention. First, the

antecedent basis of "the quantity of unique code strings" is unclear. It is unclear whether "the quantity of unique code strings" refers to the total quantity of code strings or another quantity of code strings. For the purpose of comparison with the prior art, the Examiner is interpreting "the quantity of unique code strings" to be "the total quantity of unique code strings." Second, it is unclear in what way the size of the subset corresponds to the quantity of unique code strings. Does this mean that the size of the subset is the same as the total number of unique code strings? This interpretation, however, does not make sense, because if the size of the subset was the same as the size of the total set, then the subset would not be a subset.

9. Regarding claims 59 and 71, Applicant's recitation "wherein a size of the subset of unique code strings corresponds to the defined quantity of unique code strings B" would have been unclear to a person having ordinary skill in the art at the time of the invention. First, the antecedent basis of "the defined quantity of unique code strings B" is unclear. It is unclear whether "the defined quantity of unique codes strings B" refers to the total quantity of unique codes strings or some other quantity of code strings. For the purpose of comparison with the prior art, the Examiner is interpreting "the defined quantity of unique code strings B" to be "the total quantity of unique code strings." Assuming *arguendo* that "the defined quantity of unique code strings B" is "the total quantity of unique code strings," it is still impossible to determine in what way the two numbers of code strings correspond to each other. If the numbers correspond simply in that they are equal, then the subset of unique code strings would not be a subset.

10. Regarding claim 70, Applicant's recitation "wherein the new code string model is defined with a different code string character length or a different number of code string character types from the provided code string model" would have been unclear to a person having ordinary skill in the art at the time of the invention. "[T]he new code string model" lacks antecedent basis. Because of this lack of antecedent basis, it is not possible to determine whether this new code string model is a new code string model or another way of referring to the previously defined code string model (the code string model introduced at line 3 of claim 59). For the purpose of comparison with the prior art, the Examiner is interpreting "wherein the new code string model is defined with a different code string character length or a different number of code string character types from the provided code string model" as "defining a new code string model with a different code string character length or a different number of code string character types from the provided code string model."

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 21-23, 25, 26, 59-61, 63, 64, 70-73, 75, and 76, as understood by the Examiner, are rejected under 35 U.S.C. 103(a) as being unpatentable over Doljack et

al. (US Patent 7,283,630, hereafter "Doljack") in view of Brogger (US PGPub 2001/0041214).

13. Regarding claims 21, 59, and 71, Doljack discloses all the elements of the claimed invention including:

a. providing a code string model ("64 bit binary code," C8 L63) having finite parameters (parameter 1: binary, parameter 2: 64), the finite parameters used to define a total quantity of unique code strings that can be derived from the code string model ("The number of possible 64 bit binary codes is 2^{64}, which is $1.8x10^{19}$ different numbers." C8 L64-65);

b. randomly generating a subset of unique code strings from the total quantity of unique code strings wherein a size of the subset of unique code strings corresponds to the quantity of unique code strings ("GENERATE RANDOM CODES," step 60 in Fig. 2);

c. associating attributes ("a non-random code," C10 L20) to one or more of the subset of unique code strings ("each random code is combined with a non-random code to thereby form a combination code," C10 L20-21), the attributes defining characteristics regarding the instantiations to which the one or more of the subset of unique code strings will be marked on or affixed to ("The non-random code may be, for example, the initials of the manufacturer, a tradename or other easily recognizable moniker or message," C10 L21-23);

d. providing a secure server (local computer 52, Fig. 1) having a database (secure host database 24) used to store the subset of unique code strings ("the

generated random codes are stored within the secure host database 24," C7 L54-55);

e. marking each of a quantity of the instantiations with one of the code strings of the subset ("MARK EACH PRODUCT WITH A RANDOM CODE," step 64, Fig. 2);

f. distributing the marked instantiations along a chain of commerce ("PLACE MARKED PRODUCTS INTO COMMERCE," step 66, Fig. 2);

g. validating the authenticity of one of the marked instantiations during distribution, the marked instantiation validated through exchange of transmitted signals between the secure server and a communication device ("At a retail distribution outlet such as a retail store or alternatively, at any point earlier in the distribution chain, the codes are read from the marked products and compared to random codes contained within a database in which the codes are stored upon their initial generation. If the scanned product code is not verified as a valid code, the product is identified as a counterfeit. If the product code is a valid product code a further inquiry may be made to determine whether the valid code has previously been used." C6 L13-22);

h. wherein the communication device ("scanner 50") receives an entry of the unique code string and transmits an inquiry signal containing the unique code string to the secure server ("The scanner 50 scans the code on the tag 34, preferably by scanning the bar code which is a visual representation of the binary or alphanumeric random code being utilized. The scanner 50 takes the random

code that has been scanned and downloads the scanned random code to the local computer 52." C8 L14-L25);

i. wherein the secure server receives the inquiry signal to reveal the scanned unique code string, searches the database thereon to validate the authenticity of the unique code string ("The local computer 52, in accessing the secure host database 24, then compares the scanned random product code to those codes contained within the secure host database 24 at step 70 to verify whether the scanned random code is valid," C8 L26-34), and transmits a return signal to the field reader regarding validation of the authenticity of the marked instantiation ("display the decrypted code on a display portion of the scanner 50 so that the user scanning the tags can visually view the non-random code portion and thereby verify authenticity," C11 L27-28).

14. Although Doljack discloses storing the one or more code strings ("the generated random codes are stored within the secure host database 24," C7 L54-55) and distributing the marked instantiations along a chain of commerce ("PLACE MARKED PRODUCTS INTO COMMERCE," step 66, Fig. 2), Doljack fails to explicitly disclose capturing the one or more code strings marked on each of the quantity of instantiations and storing the captured one or more code strings within the database on the secure server and distributing the marked instantiations along a chain of commerce after the captured code strings are stored.

15. However, Brogger teaches capturing the one or more code strings marked on each of the quantity of instantiations and storing the captured one or more code strings

within the database on the secure server and distributing the marked instantiations along a chain of commerce after the captured code strings are stored ("a label is generated 75 bearing a unique indice. The label is then attached to an article and/or to the certificate of authenticity 77. The unique indice is assigned to the article on which the label is placed, and this information is stored in the database." [0040]).

16. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method of Doljack to include the ordering of steps taught by Brogger, because all the claimed steps were known in the prior art and one skilled in the art could have combined the steps as claimed with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, because Brogger teaches that the ordering of the steps of printing the indice and recording the indice in the database is interchangeable ("Alternatively, the process happens in the opposite order, i.e., a unique indice is assigned to an article, and then a printer prints or otherwise generates a label bearing the unique indice." [0040]).

17. Regarding claims 22, 60, and 72, Doljack fails to explicitly disclose wherein the attributes assigned to the unique code strings are stored within the database of the secure server. However, Doljack does teach that the attributes are combined with the random code to form a combination code as discussed above. At some point this combination code must be stored before being transmitted. Storing the combination code in the database of the secure server would have been one of a finite number of options for storing the combination code. Therefore, the claim would have been

obvious because "a person of ordinary skill has a good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense."

18. Regarding claims 23, 61, and 73, Doljack further discloses wherein the validating authenticity step further includes searching the database for the attributes in order to determine tracking parameters of the marked instantiations ("VERIFY CORRECT NON-RANDOM PORTION VERIFY NO DUPLICATES," block 406, Fig. 9).

19. Regarding claims 25, 63, and 75, Doljack further discloses wherein the marking instantiations step comprises marking each unique code string of the subset on a corresponding label ("the printer 26 generates the codes on a tag or label 34," C7 L1-2).

20. Regarding claims 26, 64, and 76, Doljack further discloses wherein the marking instantiations step comprises affixing the marked labels to corresponding instantiations ("the printer 26 generates the codes on a tag or label 34 … which is then attached or affixed to the products 36," C3 L1-3).

21. Regarding claim 70, Doljack further discloses defining a new code string model with a different code string character length or a different number of code string character types from the provided code string model (C8 L60 - C9 L14 and C9 L49-62).

22. Claims 24, 27-29, 62, 65-67, 74, and 77-79, as understood by the Examiner, are rejected under 35 U.S.C. 103(a) as being unpatentable over Doljack/Brogger in view of Miolla et al. (US PGPub No. 2002/0146146 hereafter "Miolla").

23. Regarding claims 24, 62, and 74, although Doljack/Brogger fails to explicitly disclose wherein the validating authenticity step further includes storing current location

information of the marked instantiations when the tracking parameters are determined to be valid.

24. However, Miolla teaches storing current location information of the marked instantiations when the tracking parameters are determined to be valid ("The payload conveys manufacturing details, such as batch, location and/or date of manufacture." [0028]).

25. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the validating authenticity step of the method of Doljack/Brogger to include the storing current location information of Miolla in order to achieve the predictable result of tracking product location and movement.

26. Regarding claims 27-29, 65-67, and 77-79 Doljack/Brogger fails to explicitly disclose

a. wherein the marking instantiations step comprises using the process of watermarking;

b. wherein the watermarking process comprises digital watermarking, and wherein the unique code strings of the subset are each embedded in a corresponding label; and

c. wherein a deciphering step is performed to identify each of the embedded unique code strings of the subset before the unique codes strings of the subset can be authenticated.

27. However, Miolla teaches:

d. wherein the marking instantiations step comprises using the process of watermarking ("digital watermark," Abstract);

e. wherein the watermarking process comprises digital watermarking, and wherein the unique code strings of the subset are each embedded in a corresponding label ("digital watermark," Abstract); and

f. wherein a deciphering step is performed to identify each of the embedded unique code strings of the subset before the unique codes strings of the subset can be authenticated ("a reading component that detects and reads the embedded watermark." [0014]).

28. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method of Doljack/Brogger to include the watermarking of Miolla in order to achieve the predictable result of covertly embedding tracking information in a product label.

29. Claims 30, 31, 68, 69, 80, and 81, as understood by the Examiner, are rejected under 35 U.S.C. 103(a) as being unpatentable over Doljack/Brogger in view of Applicant-Admitted Prior Art (hereafter "AAPA").

30. Doljack/Brogger discloses as above. But Doljack/Brogger fails to explicitly disclose wherein the authenticity validation step further includes using a schema for the exchange of transmitted signals between the secure server and the communication device, and wherein the schema is an industry standard and wherein the schema is of an XML format.

31. However, it is admitted prior art that it is old and well known in the art to exchange data between computers using XML, because it is a common data format that is easily ported between different systems.

32. It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Doljack/Brogger to include the XML data transfer between computers of AAPA, because all the claimed steps were known in the prior art and one skilled in the art could have combined the steps as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results making the data of Doljack/Brogger portable between different systems, thereby making the method of Doljack/Brogger more versatile and adaptable.

33. The Official Notice that XML data transfer between computers was old and well known at the time of Applicant's invention is taken to be admitted prior art. The Official Notice was asserted by the Examiner in the Office action mailed May 4, 2010 (Paper No. 20100426). Applicant did not adequately traverse this Official Notice in Applicant's next response filed August 31, 2010. Therefore, the officially noticed fact is taken to be admitted prior art. See MPEP 2144.03.C.

Response to Arguments

34. The §112, 2nd paragraph rejection of the claims of the previous Office action is withdrawn in response to Applicant's amendment.

35. The Official Notice that XML data transfer between computers was old and well known at the time of Applicant's invention is taken to be admitted prior art. The Official Notice was asserted by the Examiner in the Office action mailed May 4, 2010 (Paper No. 20100426). Applicant's traversal is inadequate. MPEP §2144.03.C provides the requirements to traverse an Official Notice:

> "Specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art." [emphasis added]

Applicant's traversal amounts to a general allegation that the notice is not proper, in no way addressing why the fact officially noticed would not be common knowledge. Indeed, with no guidance as to why this simple fact is not well known, it is impossible to provide a reference addressing Applicant's potential concern. Therefore, in accordance with MPEP §2144.03.C, this officially noticed fact asserted in the previous Office action is taken to be admitted prior art.

36. The remainder of Applicant's arguments regarding the §103 rejections of the claims are moot in view of the new grounds of rejection above.

37. The double patenting rejection over Application No. 10/701,377 is withdrawn in response to the terminal disclaimer filed August 31, 2010 and approved September 30, 2010.

Conclusion

38. Applicant's amendments filed August 31, 2010 and September 23, 2010 necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

39. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

40. References considered pertinent to Applicant's disclosure are listed on form PTO-892. All references listed on form PTO-892 are cited in their entirety.

41. Because this application is now final, Applicant is reminded of the USPTO's after final practice as discussed in MPEP §714.12 and §714.13 and that entry of amendments after final is *not* a matter of right. "The refusal of an examiner to enter an amendment after final rejection of claims is a matter of discretion." *In re Berger*, 279 F.3d 975, 984, 61 USPQ2d 1523, 1529 (Fed. Cir. 2002) (citations omitted). Furthermore, suggestions or examples of claim language provided by the Examiner are just that--suggestions or examples--and do not constitute a formal requirement mandated by the Examiner. Unless stated otherwise by an express indication that a claim is "allowed," exemplary claim language provided by the Examiner to overcome a particular rejection or to change claim interpretation has *not* been addressed with respect to other aspects of patentability (e.g. §101 patentable subject matter, §112 1st paragraph written description and enablement, §112 2nd paragraph indefiniteness, and §102 and §103 prior art). Therefore, any claim amendment submitted under 37 C.F.R. §1.116 that incorporates an Examiner suggestion or example or simply changes claim interpretation will nevertheless require further consideration and/or search and a patentability determination as noted above.

42. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jamie Kucab whose telephone number is 571-270-3025. The Examiner can normally be reached on Monday-Friday 9:30am-6:00pm EST.

43. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

44. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jamie Kucab/
Examiner, Art Unit 3621